

Myxoderma platyacanthum rhomaleum, subsp. n.

Differing from *M. platyacanthum** (Clark) in having constantly broader and slightly shorter rays, slightly larger disk, much heavier abactinal and marginal spines, slightly shorter and decidedly heavier actinolateral spines, and shorter abactinal pedicellariæ. $R=100$ mm., $r=12.5$ mm., $R=8r$, breadth of ray at base 13 mm.; at a little beyond base 15.5 mm. Disk elevated, dome-shaped, rays very gradually tapered, but not attenuate distally.

Type-locality.—Off Oregon ($43^{\circ} 46' N.$, $124^{\circ} 57' W.$), 277 fathoms, grey sand; bottom temperature 42.2° Fahr.

Known from off Oregon and Central California, 277 to 296 fathoms, grey sand; 41.8° to 42.2° Fahr.

XXXVII.—Notes on *Fossorial Hymenoptera*.—XXXVII. On some Sphecinae in the *British Museum*. By ROWLAND E. TURNER, F.Z.S., F.E.S.

Genus SCELIPHRON.

Sceliphron masaicum, sp. n.

♀. Nigra, nigro-pilosa; petiolo, tertio apicali nigro, trochanteribus posticis, femoribus posticis dimidio basali, tibiis posticis tertio basali, metatarso postico basi nigro, tarsisque posticis articulo secundo flavis; alis subhyalinis, flavo leviter suffusis, venis nigris, alis anticis apice angustissime infumatis.

Long. 20–21 mm.

♀. Clypeus very distinctly bilobed at the apex, closely punctured and clothed with long black hairs, which also extend over the whole head and thorax; on each side of the bilobed central portion of the apical margin is a small tooth; mandibles bidentate at the apex, the outer tooth the longest. Eyes distinctly nearer to each other on the vertex than on the clypeus; second joint of the flagellum a little longer than the first and third combined. Pronotum deeply longitudinally grooved in the middle, finely punctured; mesonotum rugulose, scutellum and postscutellum closely longitudinally striated. Median segment with a deep and broad

* *Zoroaster platyacanthus*, H. L. Clark, Bull. Amer. Mus. Nat. Hist. vol. xxxii., July 9, 1913, p. 199, pl. xlv. figs. 1 & 2.

longitudinal median groove, the dorsal surface rather finely obliquely striated; the oblique posterior slope finely transversely striated, with a deep median groove; the sides of the segment closely vertically striated. Petiole not quite as long as hind coxa, trochanter, and femur combined. Tarsal unguis with a small median tooth, the pulvillus large. Second abscissa of the radius at least as long as the first and third combined; first recurrent nervure received close to the middle of the second cubital cell, second at about one-eighth from the apex of the same cell.

Hab. British East Africa, Ngare Narok, Masai Reserve, 6000 ft. (*A. O. Luckman*), December 31, 1913, 6 ♀♀; Mogorr River (*A. O. Luckman*); Nandi Plateau, 5700-6200 ft. (*S. A. Neave*), May 30-June 4, 1911; Uganda, Tero Forest (*S. A. Neave*), Sept. 26-30, 1911.

This is a larger species than *S. quartineæ*, Grib., with differently coloured pubescence and fore legs; the apical third, or in some specimens half, of the petiole is black; it is a smaller species than *S. spirifex*, Linn., differing also in the colour of the legs, petiole, and wings, and in the much greater length of the second abscissa of the radius.

Sceliphron eckloni, Dahlb.

Pelopæus eckloni, Dahlb. Hymen. Eur. i. p. 434 (1845).

Pelopæus clypeatus, Fairmaire, Arch. Entom. ii. p. 264 (1858).

Probably identical with *S. spinola*, Lep., as suggested by Gribodo, but I have not seen Indian specimens.

Genus SPIEX (*Ammophila*, auct.).

Sphex tenuis, Pal. Beauv.

Sphex tenuis, Pal. Beauv. Insect. rec. en Afriq. & Amer. p. 48, Hymén. (1837). ♂.

Ammophila guineensis, Ritsema, Tijdschr. v. Entom. xvii. p. 192 (1874). ♀.

Ammophila maculifrons, Cam. Ann. Transvaal Mus. ii. p. 134 (1910). ♀.

Ammophila cæruleornata, Cam. Ann. Transvaal Mus. ii. p. 135 (1910). ♂.

Sphex beniniensis, Pal. Beauv.

Sphex Beniniensis, Pal. Beauv. Insect. rec. en Afriq. & Amer. p. 48, Hymén. (1837). ♂.

Ammophila cyaniventris, Guér. Mag. de Zool. xiii. P. 114, p. 9 (1843). ♂.

Ammophila (Parapsammophila) lugubris, Gerst. Monatsber. Akad. Wiss. Berlin, p. 510 (1857). ♀ ♂.

Ammophila lugubris, Gerstaecker, Peters, Reise u. Mossambique, Zool. v. p. 480 (1862).

Sphex braunsi, sp. n.

♀. Nigra; mandibulis, apice excepto, tergitis sternitisque primo secundoque, tertio basi extrema, femoribus anticis subtus, intermediis dimidio apicali, supra nigro-lineatis, tibiis anticis intermediisque, tarsisque anticis ferrugineis; petiolo segmento primo nigro; tegulis testaceis; alis subhyalinis, apice leviter infumatis, venis nigris; pronoto mesonotoque transverse striatis.

♂. Feminæ similis; mandibulis tarsisque anticis nigris.
Long., ♀ 18, ♂ 16 mm.

♀. Mandibles with a long acute apical tooth and two strong teeth on the inner margin. Clypeus with sparse large punctures, microscopically punctured and pubescent; head subopaque, with sparse large punctures, a deep groove from the anterior ocellus to the base of the antennæ. Eyes almost parallel on their inner margins; posterior ocelli much further from the eyes than from each other, separated from the eyes by a distance about one-third greater than the length of the third joint of the flagellum. Pronotum a little longer than the scutellum, nearly twice as broad anteriorly as long, with a deep median groove on the posterior half, rather strongly transversely striated. Mesonotum strongly transversely striated, with a deep median sulcus reaching almost to the posterior margin, where the striæ are oblique. Scutellum and postscutellum longitudinally striated. Median segment rugose, with oblique striæ, which are more distinct laterally than in the middle. First joint of the petiole black, almost exactly equal in length to the hind femur, a little longer than the second joint of the petiole; second tergite longer than its apical breadth. Tarsal ungues simple, with a distinct pulvillus. Pleuræ rugose, with more or less distinct oblique striæ, evenly covered with very delicate whitish pubescence. Spiracle of the first tergite situated considerably behind the middle.

♂. One large tooth only on the inner margin of the mandibles; eyes converging towards the clypeus; apical margin of the clypeus widely and shallowly emarginate; eighth sternite rather narrowly rounded at the apex. Third cubital cell in both sexes small, contracted both on the radius and cubitus, second abscissa of the radius longer than the first in the female, a little shorter in the male, more than twice as long as the third.

Hab. Willowmore, S. Africa (*Dr. Brauns*), October 1, 1916.

The pronotum is much longer than in the common *S. tenuis*,

Pal. Beauv., and the colouring is also very different. The male genitalia are also different, the stipes being narrower and more acute at the apex than in *tenuis*. The pulvillus is absent in *tenuis*.

Sphex dolichoderus, Kohl.

Ammophila dolichodera, Kohl, Verh. zool.-bot. Ges. Wien, xxxiii. p. 383 (1883). ♂.

Ammophila pulchricollis, Cam. Ann. Transvaal Mus. ii. p. 133 (1910). ♂.

According to Dr. Brauns, Cameron's type is a female. Kohl, in his table a few pages before the description of *dolichodera*, gives the name of the species as *macrocola*. Probably he originally intended to use this name and changed it in the description, but neglected to make the alteration in the table.

Sphex ferrugineipes, Lep.

Ammophila ferrugineipes, Lep. Hist. nat. Insect. Hymen. iii. p. 383 (1845). ♀.

Ammophila dunbrodyensis, Cam. Rec. Albany Mus. i. p. 322 (1905).

Sphex basalis, Sm.

Ammophila basalis, Sm. Cat. Hym. B.M. iv. p. 214 (1856). ♀.

Ammophila nigripes, Sm. Cat. Hym. B.M. iv. p. 215 (1856). ♂.

Sphex (Coloptera) tuberculiscutis, sp. n.

♀. Nigra; mandibulis, apice excepto, clypeo, antennis articulis sex basalibus, prothorace, mesonoto lateribus, mesopleuris macula sub alis, tegulis, scutello, postscutello, tergito secundo leviter nigro suffuso, petiolo subtus, sternitis pedibusque, femoribus supra nigrolineatis, ferrugineis; alis sordide hyalinis, flavo-suffusis, venis nigris; pronoto fere polito, antice subexcavato, utrinque tuberculato, postice in medio obsolete transverse striato, mesonoto transverse striato; scutello postscutelloque longitudinaliter striatis, postice productis, lamellato-tuberculatis.

♂. Feminæ similis, tergito secundo nigro, basi fusco-ferrugineo; clypeo apice in tuberculo producto.

Long., ♀ 21-22, ♂ 22-25 mm.

♀. Mandibles with one large, broad, blunt tooth on the inner margin, clypeus broadly subtruncate at the apex. Eyes almost parallel on the inner margins; posterior ocelli almost as far from each other as from the eyes; front not concave, without a distinct longitudinal sulcus; the face and sides of the clypeus clothed with very delicate pale golden

pubescence. Propleuræ almost smooth; mesopleuræ rather sparsely punctured; sides of the median segment coarsely rugulose, dorsal surface of the segment rugose; the humeral calli, the apex of the median segment, and a long band on the hind margin of the mesopleuræ clothed with very delicate shining silver pubescence. First joint of the petiole about as long as the hind femur and trochanter combined; second tergite slender, half as long again as its apical breadth. Pulvillus well developed. Second abscissa of the radius about half as long as the first.

♂. Eyes very slightly convergent towards the clypeus; posterior ocelli a little nearer to the eyes than to each other. Clypeus produced into a porrect tubercle in the middle of the anterior margin. Transverse striæ of the pronotum more developed than in the female. First joint of petiole distinctly longer than the hind femur and trochanter combined; eighth sternite broadly truncate at the apex.

Hab. British East Africa, Masongaleni, 3000 ft. (*S. A. Neave*), March 29–April 1; Kibwezi, 3000 ft. (*S. A. Neave*), April 2–4; Mitto Andei, 2500 ft. (*S. A. Neave*), March 26–28; Tiwa River, Ukamba (*S. W. J. Scholefield*), January 22–27.

Nearly allied to *saussurei*, Buys., but easily distinguished by the curious form of the pronotum and by the more strongly produced scutellum and postscutellum. The male clypeus differs strongly from that of the Palæartic species *barbara*, Lep., and *judæorum*, Kohl.

GENUS CHLORION.

Chlorion (Isodontia) apicata, Bingham.

Amnophila apicata, Bingham. *Fauna Brit. India*, Hymen. i. p. 234 (1897). ♀.

Chlorion (Isodontia) prasinus, Guér.

Sphex prasinus, Guér. *Voy. Coq.*, Zool. ii. p. 262 (1839).

Sphex morosa, Sm. *Journ. Proc. Linn. Soc.*, Zool. iv., Suppl. p. 122 (1860).

Chlorion (Proterosphex) paulinieri, Guér.

Sphex Paulinieri, Guér. *Magas. de Zool.* xiii. P. 114, p. 8 (1843). ♀.

Sphex eximia, Lep. *Hist. nat. Insect. Hymén.* iii. p. 360 (1845). ♂.

This belongs to the group of *aurulentus*, Fabr., with the median segment transversely striated. Kohl wrongly treats the species as a true *Chlorion* in the most restricted sense, but had not seen a specimen.

XXXVIII.—*New Australian Diplopterous Hymenoptera.*

By ROWLAND E. TURNER, F.Z.S., F.E.S.

Paralastor aterrimus, sp. n.

♂. Niger; clypeo apice anguste, fronte interantennali, scapoque subtus flavis; tarsis fusco-brunneis; alis hyalinis, anticis, præcipue area costali, infuscatis; venis nigris; clypeo apice subtruncato; sternito secundo basi elevato-tuberculato.

Long. 10 mm.

♂. Clypeus closely microscopically punctured, with larger scattered punctures, with very delicate close-lying pubescence at the base, the apex subtruncate, scarcely emarginate. Front coarsely and rather closely punctured, vertex coarsely punctured-rugose. Thorax and median segment coarsely punctured-rugose; tegulæ very coarsely punctured. First tergite very coarsely punctured, second much more finely and sparsely punctured; the apical margins of tergites 3-6 narrowly fuscous brown. Second sternite shining, rather strongly, but not very closely punctured, raised and sub-tuberculate at the base. The first abdominal segment is broad. Antennæ, as in all males of the genus, with only eight well-developed joints, the joints beyond the eighth minute and concealed.

Hab. Townsville, Queensland (*Dodd*).

Paralastor diabolicus, sp. n.

♂. Niger; clypeo apice late maculaque magna basali, fronte interantennali scapoque subtus flavis; tarsis articulo apicali luteo; alis hyalinis, anticis dimidio costali fortiter infuscatis, venis nigris; clypeo apice late emarginato; sternito secundo basi fortiter elevato-tuberculato.

Long. 11 mm.

♂. Clypeus closely microscopically punctured, with sparse larger punctures intermingled, the apex widely, but not very deeply emarginate. Head coarsely punctured, rather more sparsely on the front than on the vertex; a low arched carina above the anterior ocellus. Thorax and tegulæ very coarsely punctured; median segment punctured-rugose. First tergite broad, very coarsely punctured; second much more finely punctured, shining between the punctures; second sternite very strongly raised and bluntly